

# ABSTRACT OF THE DISCLOSURE

A photomask comprises a substrate, a translucent film selectively formed on the substrate, and a shading film selectively formed on the translucent film,  
5 wherein when the substrate, the translucent film and the shading film have Young's moduli (MPa)  $E_0$ ,  $E_1$  and  $E_2$ , and film thickness (m)  $d_0$ ,  $d_1$  and  $d_2$  respectively, internal stresses (MPa) of the translucent film and the shading film at room temperature are  $s_1$  and  $s_2$   
10 respectively, a covering rate by the translucent film defined by an area in which the shading film is not formed is expressed as  $h$ , and coefficients are expressed as  $k_1 = 1.3 \times 10^{-8}$ ,  $k_2 = -9.5 \times 10^{-2}$ ,  $k_3 = 6.0 \times 10^{-7}$ , and  $k_4 = -5.2 \times 10^{-2}$  respectively,  
15 the substrate, the translucent film and the shading film satisfy a condition given by the following expression:

$$\left| \frac{1}{E_0 \cdot d_0} \cdot \left\{ h \cdot \left( k_1 \cdot \frac{s_1}{E_1 \cdot d_1} + k_2 \right) + \left( k_3 \cdot \frac{s_2}{E_2 \cdot d_2} + k_4 \right) \right\} \right| \leq 1.4 \times 10^{-4} (m^{-1})$$